

IN THE CLAIMS

Please amend the claims as follows:

1-11. (Cancelled).

12-14. (Cancelled).

15. (Currently Amended) ~~The method of claim 12~~ A method of
producing a recording medium containing an information signal,
comprising:
5 applying a radiation beam, in response to an information
signal, to a first area of an information layer of a recording
medium to cause the first area of the information layer to assume a
first state thereby forming a mark, and
10 applying the radiation beam to a second area of the
information layer, before and after the mark, while pulsing the
beam to cause the second area of the information layer to assume a
second state that is different than the first state, the pulses
including erase pulses having an erase power level (P_e) and a bias
power level (P_b) between the erase pulses, the bias power level
15 (P_b) being in a range between zero and the erase power level (P_e),
~~in which~~ wherein:

the bias power level (P_b) increases in the range between
zero and the erase power level (P_e) as the recording speed (V)
increases when the recording speed is below a chosen recording
speed, and

20 the bias power level (P_b) is substantially identical to
the erase power level (P_e) when the recording speed exceeds the
chosen recording speed (29).

16. (Cancelled).

17. (Currently Amended) ~~The method of claim 16~~ A method of
producing a recording medium containing an information signal,
comprising:

5 applying a radiation beam, in response to an information
signal, to a first area of an information layer of a recording
medium to cause the first area of the information layer to assume a
first state thereby forming a mark, and

10 applying the radiation beam to a second area of the
information layer, before and after the mark, while pulsing the
beam to cause the second area of the information layer to assume a
second state that is different than the first state, the pulses
including erase pulses having a erase power level (P_e) and a bias
power level (P_b) between the erase pulses, the bias power level
(P_b) being in a range between zero and the erase power level (P_e),

15 wherein the erase pulses have a duty cycle of T_e/T_b , where
 T_e is the duration of an erase pulse and T_b is the time between two
successive erase pulses, and the duty cycle depends on the
recording speed (V),

_____ and wherein ~~in which~~ the duty cycle increases in a range
20 between nearly zero and unity as the recording speed (V) increases.

18-20. (Cancelled).

21. (Currently Amended) ~~The recording device of claim 18~~ A
recording device comprising:
_____ a radiation source for applying a radiation beam to an
information layer of a recording medium;
5 _____ means for moving the radiation beam along the information
layer; and
_____ control means to control the power of the radiation beam:
_____ for causing a first area of the information layer to
assume a first state to form a mark in response to an information
10 signal; and
_____ for pulsing the radiation beam including erase pulses
having an erase power level (P_e) and a bias power level (P_b)
between the erase pulses to a second area of the information layer,
before and after the mark, to cause the second area of the
15 information layer to assume a second state that is different than
the first state, the bias power level (P_b) being in a range between
zero and the erase power level (P_e), ~~in which~~ wherein:

the bias power level (P_b) increases in the range between
zero and the erase power level (P_e) as the recording speed (V)

20 increases when the recording speed is below a chosen recording speed; and

the bias power level (P_b) is substantially identical to the erase power level (P_e) when the recording speed is above the chosen recording speed.

22. (Cancelled).

23. (Currently Amended) ~~The recording device of claim 22. A recording device comprising:~~

~~_____ a radiation source for applying a radiation beam to an information layer of a recording medium;~~

5 ~~_____ means for moving the radiation beam along the information layer; and~~

~~_____ control means to control the power of the radiation beam;~~

~~_____ for causing a first area of the information layer to assume a first state to form a mark in response to an information signal; and~~

10 ~~_____ for pulsing the radiation beam including erase pulses having an erase power level (P_e) and a bias power level (P_b) between the erase pulses to a second area of the information layer, before and after the mark, to cause the second area of the~~
15 ~~information layer to assume a second state that is different than the first state, the bias power level (P_b) being in a range between zero and the erase power level (P_e),~~

wherein the erase pulses have a duty cycle of T_e / T_p ,
where T_e is the duration of an erase pulse and T_p is the time
between two successive erase pulses, and the duty cycle depends on
the recording speed (V) in which,
and wherein the duty cycle increases in a range between
nearly zero and unity as the recording speed (V) increases.

24. (Currently Amended) A recording medium containing an
information signal, produced by the method of claim 1215.